

REMARKS

The applicant has studied the Office Communication dated September 23, 2003, and has made amendments to the claims. Claims 2 and 13 have been cancelled without prejudice, and claims 1, 9-12, and 14-26 have been amended. It is submitted that the application, as amended, is in condition for allowance. Reconsideration and reexamination are respectfully requested.

The Examiner has rejected the specification for improper incorporation of essential material by reference to a foreign application. The applicant has herein amended the specification according to the Examiner's suggestion, wherein the phrase, "which are hereby incorporated by reference," recited at lines 3-4 of the first page is deleted.

The applicant has noted an oversight regarding the attribution of elements as recited by the claims and specification. In particular, specification and claims improperly described the connection 12 of the first and second heating coils in the first described embodiment of the invention as a temperature detecting terminal. In fact, the first and heating coils are connected to a current supplying terminal. Accordingly, the shielding coil 13 is properly identified as comprising a temperature detecting terminal. This proper arrangement is similar to the second embodiment described in the original specification, where the first and second heating coils are connected in series such that current flowing through each coil are opposite in phase. Claims 1 and 13 have been amended to reflect this amendment, which is supported by the figures and unchanged portions of the specification. The specification has been amended to further clarify the arrangements.

A substitute specification is enclosed herein to replace the original specification filed with the application. A marked up copy, which shows the aforementioned changes made to the original specification, is also enclosed for the Examiner's convenience. The substitute specification includes the same changes as are indicated in the marked-up copy of the original specification, showing additions and deletions. It is believed that this amendment does not introduce new matter in the application.

The applicant, in accordance with MPEP § 609, has attached a copy of the Korean Utility Laid-Open Publication No. 97-64561. This reference is included as an Information Disclosure Statement and listed on the attached Form PTO-1449.

The Examiner rejected claims 10-26 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the



applicant regards as the invention. In particular, Examiner noted several instances of insufficient antecedent basis for elements stated in claims 10-12. Claims 14-26 are rejected due to being incorrectly listed as dependent upon claim 11. Applicant has amended claims 10-12 and 14-26 to clarify and provide proper antecedent bases to the elements of these claims. Furthermore, claims 14-26 now correctly depend from amended, independent claim 12. The aforementioned amendments do not introduce new matter in the application. Accordingly, it is respectfully requested that this rejection be withdrawn.

Claims 1, 3-9, 12, 14-22, 25 and 26 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,503,322, issued to Kishimoto, et al. (hereinafter referred to as "the Kishimoto reference"). This rejection is respectfully traversed.

A proper rejection for anticipation under § 102 requires complete identity of invention. The claimed invention, including each element thereof as recited in the claims, must be disclosed or embodied, either expressly or inherently, in a single reference. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991); Standard Havens Prods., Inc. v. Gencor Indus., Inc., 953 F.2d 1360, 1369, 21 U.S.P.Q.2d 1321, 1328 (Fed. Cir. 1991).

The invention defined by amended claim 1 comprises first and second heating coils that are connected in series. With respect to amended claim 12, an invention is defined wherein the first heating coil and the first electrode are connected in series. Accordingly, both amended claims 1 and 12 recite an element where a first heating coil is connected in series with either a second heating coil or a first electrode. This connection provides for a reduction in the electromagnetic field propagated by the current flowing through the coils and/or electrode.

The Kishimoto reference describes a heat sensitive heater wire comprising a tubular housing, a first tubular layer disposed within the housing, a second tubular layer disposed within the first tubular layer, and a core wire disposed within the second tubular layer. A first wire conductor is coiled around the first tubular layer, a second wire conductor is coiled around the second tubular layer, and a third wire conductor is coiled around the core wire. Either the first or second tubular layers acts as a heat generating layer, or a thermistor. The remaining layer acts as a temperature fuse layer.

A similar package, including all of the elements recited in amended claims 1 and 12, is not identically disclosed in the Kishimoto reference. There is no disclosure in the Kishimoto

reference of a serial connection between the second and third conductors of the Kishimoto reference. Furthermore, the Kishimoto fails to describe or suggest a combination of elements to reduce the electromagnetic field propagated by the invention. In the absence of such a disclosure, a rejection of amended claims 1 and 12 under 35 U.S.C. § 102(b) in view of the Kishimoto reference should be withdrawn.

Since claims 3-9 depend from amended claim 1, they should be deemed allowable for the reasons cited above with respect to claim 1. Similarly, claims 14-22, 25 and 26, which depend from amended claim 12, distinguish over the cited art and should be deemed allowable.

Claim 2 was objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form. Accordingly, elements recited in cancelled claim 2 have been incorporated into amended claim per the Examiner's suggestion. As stated above, claims 10 and 11, which depend from amended claim 1, have been amended to overcome the rejection under 35 U.S.C. § 112, second paragraph, and should therefore be allowed. Similarly, claims 13, 23, and 24 were amended to overcome § 112 rejection. Since amended claims 13, 23 and 24 depend from amended claim 12, these dependent claims should also be allowed.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.



Respectfully submitted,

Lee, Hong, Degerman, Kang & Schmadeka

Date: December 22, 2003

By: 

Amit Sheth

Registration No. 50,176

Attorney(s) for Applicant(s)

Customer No. 035884

Lee, Hong, Degerman, Kang & Schmadeka
801 S. Figueroa Street, 14th Floor
Los Angeles, California 90017
Telephone: 213-623-2221
Facsimile: 213-623-2211

